FIG. 1

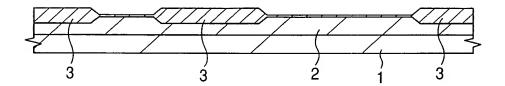


FIG. 2

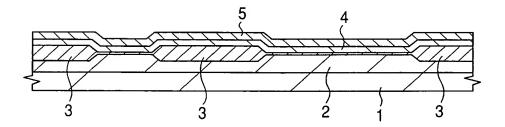


FIG. 3

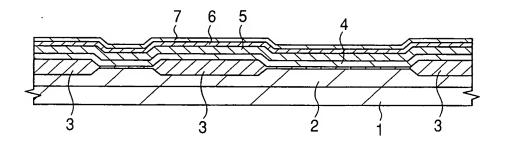


FIG. 4

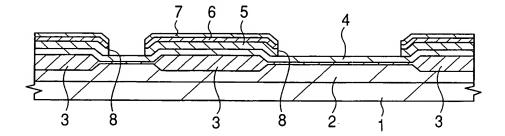


FIG. 5

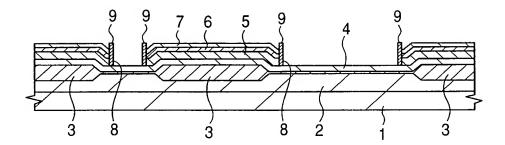


FIG. 6

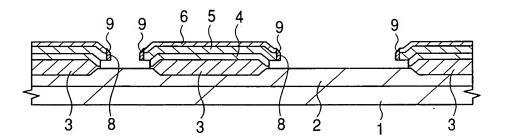


FIG. 7

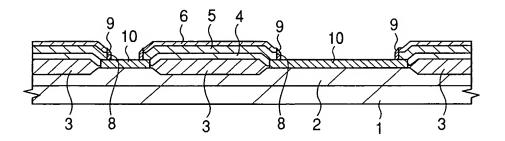


FIG. 8

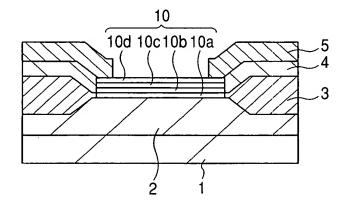


FIG. 9

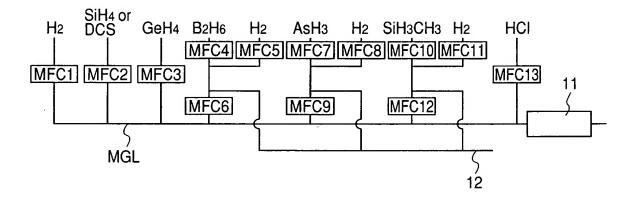
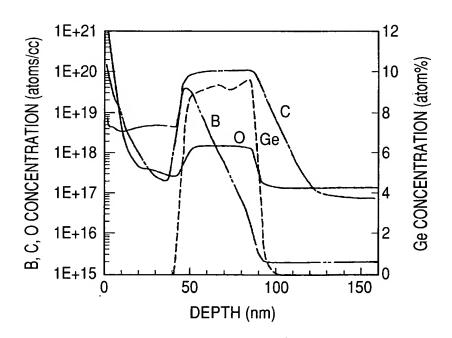
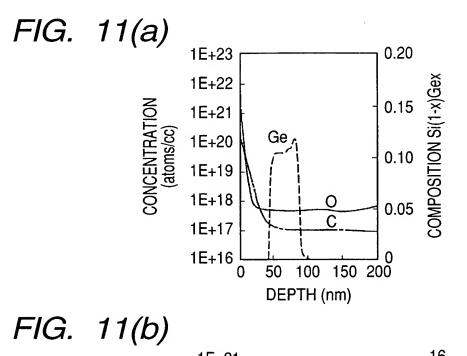


FIG. 10





1E+21 1E+20 1E+19 1E+17 1E+16 1E+15 0 100 200 300 400 DEPTH (nm)

FIG. 12

SiH3CH3 CONCENTRATION (%)	OXYGEN-BASED IMPURITY CONCENTRATION (ppm) (THEORETICAL VALUE)	OXYGEN-BASED IMPURITY CONCENTRATION (ppm) (MAKER GUARANTEED VALUE)
100	10	10
10	1	10
5	0.5	10
1	0.1	10
0.1	0.01	10

FIG. 13

/		SCB		Ž	Conc	MPURITY COI	IMPURITY CONCENTRATION (ppm)	NOILITIII	COMPABISON OF OXYGEN
	Carbon DN	(sccm)	(woos)	ت	(%)	BEFORE DILUTION	AFTER DILUTION	EFFECT	CONCENTRATION WITH RESPECT TO Conc.0.1% PRODUCT
	0.060	50	450	90		0.1	0.010	0.100	1.0
(a)	0.060	10	490	300	1	1.0	0.002	0.020	0.2
	0.060	10	990	009	1	0.1	100.0	0.010	0.1
	0.060	10	990	09	10	ļ	0.010	0.010	1.0
(Q)	0.060	10	4990	300	10	ļ	0.002	0.002	0.5
	0.060	10	9990	009	10	ļ	0.001	0.001	0.1
	0.060	10	490	09	5	9.0	0.010	0.020	1.0
(0)	0.060	10	2490	300	5	5.0	0.002	0.004	0.2
	0.060	10	4990	009	5	9.0	0.001	0.005	0.1
(p)	090.0	09	ı	1	0.1	0.01		1	I

# FIG. 14(a)

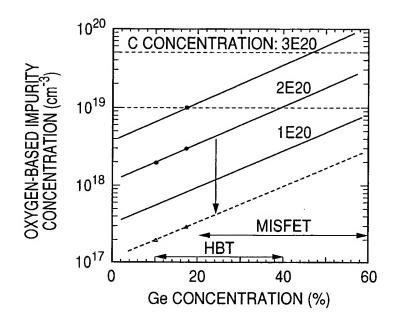
## FIG. 14(b)

Carbon	a J	Ē	_ Z	C	IMPURITY COI	NCENTRATION (m)	COMPARISON OF OXYGEN	1
NO	(sccm)	(sccm)	(sccm)	; (%)	BEFORE DILUTION	AFTER	BEFORE AFTER WITH RESPECT TO DILUTION DILUTION DILUTION	PERFORMANCE WITH RESPECT TO Conc.0.1% PRODUCT
090'0	10	490	300	1	0.1	0.002	0.2	0.28 (APPROXIMATELY 30%)
090.0	10	4990	300	10	ļ	0.002	0.2	0.39 (APPROXIMATELY 40%)
090.0	10	2490	300	5	9.0	0.002	0.2	0.49 (APPROXIMATELY 50%)
090.0	9	-		0.1	0.01	1	1	I

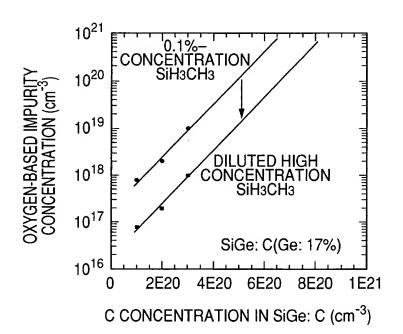
FIG. 14(c)

UCT UCT			
COST COMPARISON (COST RATIO) WITH RESPECT TO Conc.0.1% PRODUCT	1.7	2.4	5.9
gas	Conc.1%SiH3CH3+H2	Conc.5%SiH3CH3+H2	Conc.10%SiH3CH3+H2

FIG. 15



### FIG. 16



### FIG. 17

	i-SiGe:C	p+-SiGe:C	p⁻-SiGe:C	cap-Si
Duration(sec)	120	30	60	90
MFC1	20000	20000	20000	20000
MFC2(DCS)	100	100	100	100
MFC3	50	50	50	-
MFC4	_	480	150	150
MFC5	-	1000	1000	1000
MFC6	_	600	200	200
MFC7	_	_	_	_
MFC8	_	_	_	_
MFC9	_	_	_	_
MFC10	10	10	10	-
MFC11	490	490	490	_
MFC12	300	300	300	_
MFC13	10	10	10	6

FIG. 18

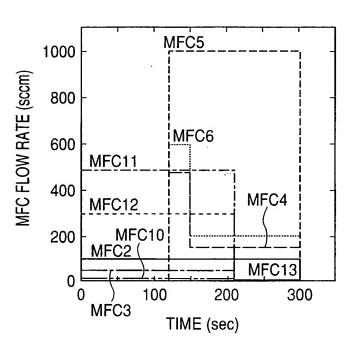
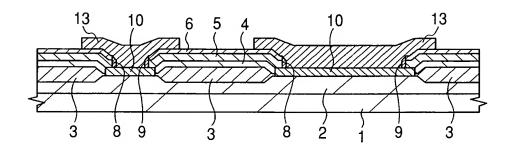
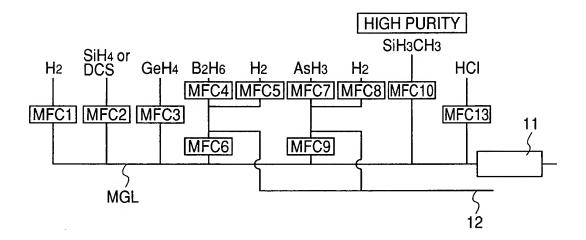


FIG. 19



### FIG. 20(a)



## FIG. 20(b)

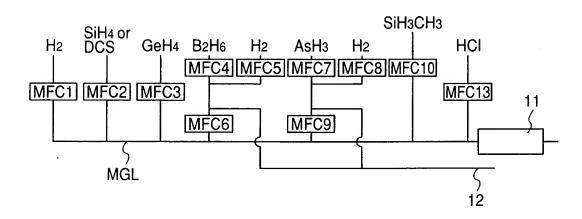


FIG. 21

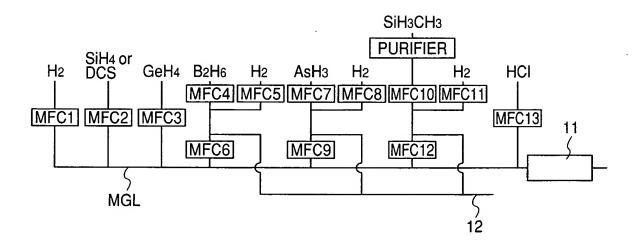


FIG. 22

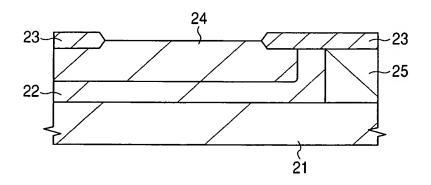


FIG. 23

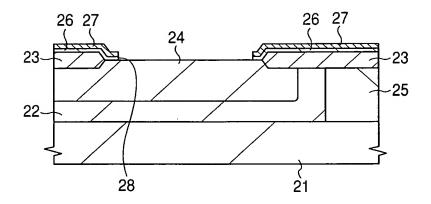


FIG. 24

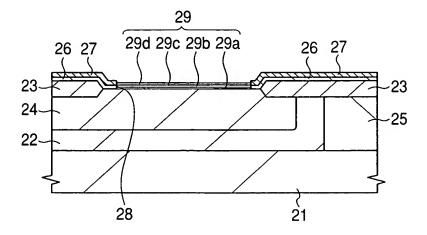


FIG. 25

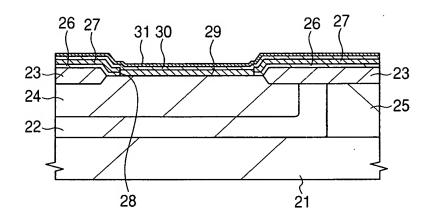


FIG. 26

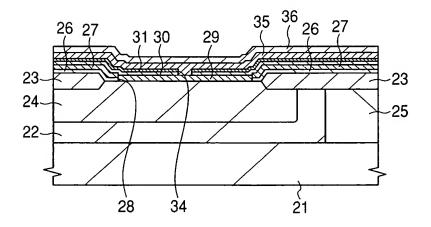


FIG. 27

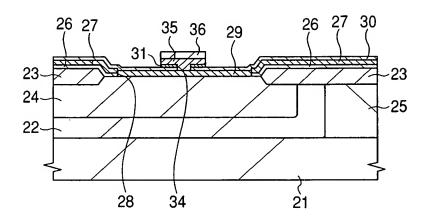


FIG. 28

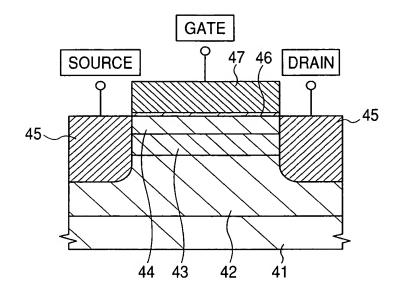


FIG. 29

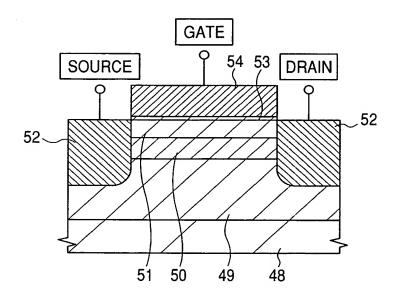


FIG. 30

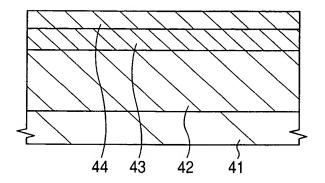


FIG. 31

46

44

43

42

41

FIG. 32

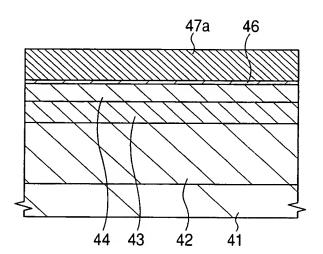


FIG. 33

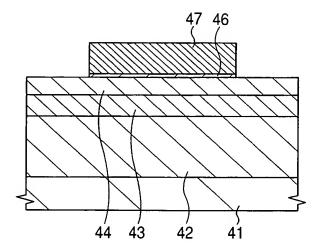


FIG. 34

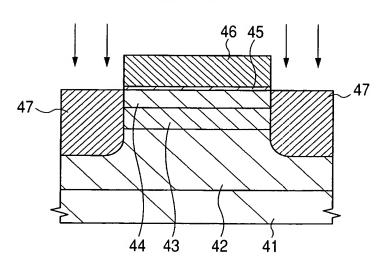


FIG. 35

FIG. 36

FIG. 37

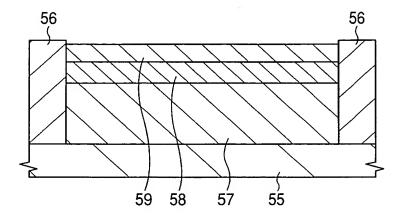


FIG. 38

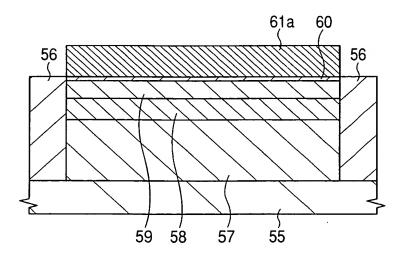


FIG. 39

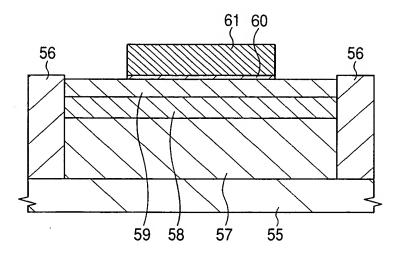


FIG. 40

